```
<110> Mohamadzadeh, Mansour
       Curiel, Tyler J.
       Morris, Cindy A.
<120>
       Dendritic Cell Binding Proteins and
       Uses Thereof
<130> D6486
<140>
      10/552,153
<141> 2004-04-08
<150> PCT/US2004/10832
<151> 2003-04-08
<160> 40
<210>
       1
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells
<400>
Tyr Pro Ile Val Asn Thr Ala Val Ala Thr His Met
                                    10
<210>
       2
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221>
      PEPTIDE
<223> peptide specific to myeloid dendritic cells
<400>
       2
Ala Thr Phe Thr Val Gly Pro Pro Gln Leu Leu Arg
<210>
      3
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells
```

```
<400> 3
Phe Tyr Pro Ser Tyr His Ser Thr Pro Gln Arg Pro
                                    10
<210>
       4
<211>
       12
<212> PRT
<213> artificial sequence
<220>
<221>
      PEPTIDE
<222>
<223> peptide specific to myeloid dendritic cells;
       Xaa = unknown at position 7
<400>
Thr Ser Ile Gly Thr His Xaa Leu Ser Ala Ala Leu
                5
                                    10
<210>
       5
<211> 12
<212>
      PRT
<213> artificial sequence
<220>
<221>
      PEPTIDE
<223>
      peptide specific to myeloid dendritic cells
<400>
      5
Thr Glu Thr Ser Trp Ser Met Phe Pro Leu His Leu
<210>
       6
<211> 12
<212>
      PRT
<213>
      artificial sequence
<220>
<221>
      PEPTIDE
<223>
      peptide specific to myeloid dendritic cells
<400>
Ala Pro His Leu Pro Tyr Leu Arg Gly Leu Asn Leu
                5
                                    10
      7
<210>
<211>
      12
<212>
      PRT
<213>
      artificial sequence
```

```
<220>
<221>
      PEPTIDE
<223> peptide specific to myeloid dendritic cells
<400>
His His Asn Ser Asn His Arg Ser Phe His Tyr Leu
                                    10
<210>
       8
<211>
      12
<212> PRT
<213> artificial sequence
<220>
<221>
      PEPTIDE
<223>
      peptide specific to myeloid dendritic cells
<400> 8
Ser Tyr Ala Asn Leu Ile Arg Ser Ile Gln Pro Gly
<210>
       9
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
      peptide specific to myeloid dendritic cells
<223>
<400>
Thr Leu Val His Gln Trp Gln Pro Trp Pro Lys Ala
                5
                                    10
<210>
      10
<211>
      12
<212>
      PRT
<213> artificial sequence
<220>
<221>
      PEPTIDE
<223>
      peptide specific to myeloid dendritic cells
<400>
Ile Arg His Thr Thr Ser Gly Pro Pro Pro Ser Ser
                5
                                    10
<210>
      11
<211> 12
<212> PRT
```

<213> artificial sequence

```
<220>
<221>
      PEPTIDE
<223>
      peptide specific to myeloid dendritic cells
<400>
       11
Tyr Pro Gln Ala Leu Asn Thr Gln Pro Asp Trp Pro
<210>
      12
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221>
      PEPTIDE
<223> peptide specific to myeloid dendritic cells
<400>
Ala Tyr Tyr Lys Thr Ala Ser Leu Ala Pro Ala Glu
                5
                                    10
<210>
      13
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells
<400>
       13
Ser Gln Asn Ser Leu Tyr Ser Ser Lys Pro Val Arg
                5
                                    10
<210>
      14
<211>
      12
<212> PRT
<213> artificial sequence
<220>
<221>
      PEPTIDE
      peptide specific to myeloid dendritic cells
<223>
<400> 14
Ser Leu Ser Leu Leu Thr Met Pro Gly Asn Ala Ser
                                    10
<210>
       15
<211>
      12
```

<212> PRT

```
<213> artificial sequence
<220>
<221>
      PEPTIDE
<223> peptide specific to myeloid dendritic cells
<400>
Gln Ser Gln Thr Tyr Gln Thr His Ser Val Thr Met
                5
                                    10
<210> 16
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells
<400> 16
Glu Pro Ile His Pro Glu Thr Thr Phe Thr Asn Asn
                                    10
<210> 17
<211>
      12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells
<400> 17
Glu Thr Pro Met Val His Trp Pro Ser Thr Ser Pro
                                    10
<210> 18
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
      peptide specific to myeloid dendritic cells
<223>
<400>
       18
Ser Leu Ser Leu Leu Thr Met Pro Gly Asn Ala Ser
                5
                                    10
       19
<210>
```

<211> 12

```
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells
<400> 19
Asn Trp Trp Ser Asp Trp Val Met Leu Thr Gln Ser
<210>
      20
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to myeloid dendritic cells
<400>
     20
Gln Trp Pro Gln Tyr His Tyr Leu Arg Pro Thr Leu
                5
                                    10
<210> 21
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
     peptide specific to Langerhans dendritic cells
<223>
<400>
      21
Ser Ile Thr Gln His Leu Gln Leu Lys Pro Leu Ala
                                    10
                5
<210> 22
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<222> 9
<223> peptide specific to Langerhans dendritic cells;
       Xaa = unknown at position 9
<400>
Val Ser His Pro Leu Trp His Pro Xaa Arg Ile Leu
                5
                                    10
```

```
<210> 23
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells
<400> 23
Val Ser Ser Pro Pro Arg Val Ser Gly Ile Gly Leu
                                    10
                5
<210>
      24
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells
<400>
His Pro Pro Glu Ile Tyr Ser Pro Pro Arg Tyr Pro
                5
                                    10
<210>
      25
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells
<400> 25
His Ser Leu Arg Leu Asp Phe Met Ala Pro Leu Thr
                5
                                    10
      26
<210>
<211>
      12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells
```

```
<400> 26
Leu Pro Pro Gly Ala Asp Leu Tyr Phe His Pro Ser
<210>
      27
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells
<400>
Ile Pro Pro Leu Arg Ile Thr Glu Val Thr Pro Thr
                                    10
                5
<210> 28
<211> 12
<212>
      PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells
<400> 28
Ile Arg His Thr Thr Ser Gly Pro Pro Pro Ser Ser
                                    10
                5
<210> 29
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells
<400> 29
Val Ser Ser Pro Pro Arg Val Ser Gly Ile Gly Leu
                                    10
<210>
       30
<211>
      12
<212>
      PRT
<220>
<221>
      PEPTIDE
<222> 10
```

```
<223> peptide specific to Langerhans dendritic cells;
       Xaa = unknown at position 10
<400>
       30
Lys Ile Met Gln Ser Pro Leu Gln His Xaa Ala Pro
                                    10
<210>
       31
<211>
       12
<212>
      PRT
<213> artificial sequence
<220>
<221>
      PEPTIDE
<222>
<223> peptide specific to Langerhans dendritic cells;
       Xaa = unknown at position 4
<400>
       31
Lys Val Trp Xaa Ile Asp Trp Pro Pro Pro Ala Tyr
                                    10
                5
<210>
       32
<211>
      12
<212>
      PRT
<213> artificial sequence
<220>
<221>
      PEPTIDE
<222>
      10
      peptide specific to Langerhans dendritic cells;
<223>
       Xaa = unknown at position 10
<400>
       32
Ala Asp Arg Ser Arg Glu Leu Ala Leu Xaa Ile Phe
                5
                                     10
<210>
       33
<211> 12
<212> PRT
<213>
      artificial sequence
<220>
<221>
      PEPTIDE
      peptide specific to Langerhans dendritic cells
<223>
<400>
       33
Ile Ile Pro Ser Thr Ala Asn Lys Ser Ile Ala Thr
                5
                                     10
```

```
<210> 34
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells
<400> 34
Ser Asn Leu Ser Arg Thr Thr Leu Tyr Ser Gln Val
<210>
      35
<211>
      12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells
<400> 35
His Ser Leu Arg Ser Asp Trp Val Ser Pro Asn Thr
<210> 36
<211> 12
<212> PRT
<213> artificial sequence
<220>
<221> PEPTIDE
<223> peptide specific to Langerhans dendritic cells
<400>
      36
Ser Ser Thr Ile Asn Tyr Asn Arg Leu Asn Leu His
                5
                                    10
<210> 37
<211>
      12
<212> PRT
<213> artificial sequence
<220>
<221>
     PEPTIDE
<223> peptide specific to Langerhans dendritic cells
<400>
Ser Leu His Arg Ser Ser Ser Leu Pro Ile Ser Thr
```

10

5

<210>	38	
<211>	12	
<212>	PRT	
	artificial sequence	
<220>		
<221>	PEPTIDE	
<223>	peptide used as negative control	
<400>	38	
Glu Pro	o Ile His Pro Glu Thr Thr Phe Thr Asn Asn 5 10	
<210>	39	
<211>	95	
<212>	DNA	
<213>	artificial sequence	
<220>		
<223>	forward primer to fusion protein of DC- binding peptide 3 and immunodominant domains of HER2/Neu	
<400>	39	
		50
tgatggggac cctcgaggcg gaggtcgtag actgctgcag gaaac 95		
<210>	40	
<211>	80	
<212>		
<213>	artificial sequence	
<220>		
<223>	reverse primer to fusion protein of DC-	
	binding peptide 3 and immunodominant domains of HER2/Neu	
<400>	40	
	acct gggggtccct ggccatgcgg gagaattcag acaccaactc	50
tecgecaceg etaggtgtea geggetecae 80		